

I CLAIM AS MY INVENTION:

1. A device for transmitting and receiving data for remotely controlling a hearing device, comprising:

a transmission device comprising a transmitter coil to transmit data;

a reception device comprising a receiver coil for receiving data; and

a common core on which both said transmitter coil and said receiver coil are wound, also causing said receiver coil to be excited for transmission of data by said transmitter coil.

2. A device as claimed in claim 1 wherein said reception device comprises a receiver circuit, and a protective circuit connected between said receiver circuit and said receiver coil to separate said receiver circuit from said receiver coil.

3. A device as claimed in claim 2 wherein said protective circuit comprises a capacitor and a parallel circuit of two diodes connected with opposite polarity, said capacitor being connected in series with said parallel circuit.

4. A device as claimed in claim 2 wherein said protective circuit is connected in parallel with said receiver coil.

5. A device as claimed in claim 1 wherein said reception device and said transmission device each operate in a frequency range of between 50 kHz and 200 kHz.

6. A device as claimed in claim 1 wherein said reception device comprises a reception oscillator circuit, and wherein said receiver coil forms an oscillator circuit coil for said oscillator circuit.

7. A device as claimed in claim 6 wherein said transmission coil has an inductance associated therewith and wherein said reception oscillator circuit has a resonant frequency, and wherein said reception device comprises a correction

capacitor to correct the resonant frequency of the reception oscillator circuit for deviation from said resonant frequency caused by said inductance of said transmission coil.

8. A device as claimed in claim 7 wherein said reception device comprises a receiver circuit and a protective circuit connected between said receiver circuit and said reception coil to separate said receiver circuit from said receiver coil, said protective circuit comprising said correction capacitor and a parallel circuit of two diodes connected with opposite polarity, said correction capacitor being connected in series with said parallel circuit.